

Amendments to the Claims:

1. (Previously Presented) An electrical machine of the transversal-flux type, comprising
a stator comprising a plurality of stator elements with magnetic flux conductors and an electric conductor forming a winding extending in an essentially closed winding path through each magnetic flux conductor, and
a movable element which comprises a number of permanent-magnet members and which is movable in relation to the stator along a movement path,
wherein the movable element is adapted to carry out a linear reciprocating motion,
wherein the essentially closed winding path comprises a first current-carrying section extending essentially along the movement path,
wherein each magnetic flux conductor is adapted to form, together with one of said permanent-magnet members, a closed magnetic flux circuit extending around said current-carrying section,
wherein each permanent-magnet member comprises a primary magnet that has a north pole and a south pole and a magnetic direction extending from the south pole to the north pole and essentially across the movement path, and
wherein the permanent-magnet members are arranged in an alternating order in the movable element with respect to the magnetic direction of the primary magnet,
characterized in that adjacent permanent-magnet members of the movable element are separated from each other by an intermediate member comprising at least one secondary magnet which has a north pole and a south pole and a magnetic direction extending from the south pole to the north pole and essentially across the magnetic direction of the primary magnet, wherein magnetic fields of adjacent permanent-magnet members and their secondary magnets are operable to mutually repel for essentially avoiding flux fringing in respect of the stator.
2. (Previously presented) An electrical machine according to claim 1, characterized in that the magnetic direction of the secondary magnet extends essentially parallel to the movement path.

3. (Previously presented) An electrical machine according to claim 2, characterized in that each intermediate member of the movable element comprises two secondary magnets.

4. (Previously presented) An electrical machine according to claim 3, characterized in that secondary magnets of an intermediate member between first and second adjacent permanent-magnet members are arranged in such a way that the first secondary magnet is in the vicinity of the north pole of the primary magnet of the first permanent-magnet member and the south pole of the primary magnet of the second permanent-magnet member and so that the second secondary magnet is in the vicinity of the south pole of the primary magnet of the first permanent-magnet member and the north pole of the primary magnet of the second permanent-magnet member.

5. (Previously presented) An electrical machine according to claim 3, characterized in that each intermediate member of the movable element comprises a layer of a magnetically insulating material outside the two secondary magnets.

6. (Previously presented) An electrical machine according to claim 3, characterized in that each permanent-magnet member comprises a first magnetic flux conductor on one side of the primary magnet and a second magnetic flux conductor on the other side of the primary magnet.

7. (Previously presented) An electrical machine according to claim 3, characterized in that the secondary magnets of an intermediate member between two adjacent permanent-magnet members are arranged in such a way that the first secondary magnet extends between a first magnetic flux conductor of the two permanent-magnet members and so that the second secondary magnet extends between a second magnetic flux conductor of the two permanent-magnet members.

8. (Previously presented) An electrical machine according to claim 1, characterized in that the magnetic direction of said secondary magnet is essentially perpendicular in relation to the magnetic direction of the primary magnets.

9. (Previously presented) An electrical machine according to claim 1, characterized in that each magnetic flux circuit comprises a magnetic flux that is parallel to a plane which is essentially perpendicular to the movement path.

10. (Previously presented) An electrical machine according to claim 1, characterized in that the distance between a centre of adjacent permanent-magnet members is essentially equal to the distance between a centre of adjacent magnetic flux conductors of the stator.

11. (Previously presented) An electrical machine according to claim 1, characterized in that the magnetic flux conductors of the stator are arranged in an alternating order with respect to the direction of the magnetic flux in relation to the permanent-magnet members in the respective magnetic flux circuit.

12. (Previously presented) An electrical machine according to claim 1, characterized in that the essentially closed winding path comprises a second current-carrying section extending essentially parallel to the movement path.

13. (Previously presented) An electrical machine according claim 12, characterized in that the first current-carrying section of the winding path is associated with essentially a first half of the magnetic flux conductors of the stator and the second current-carrying section of the winding path is associated with essentially a second half of the magnetic flux conductors of the stator.

14. (Previously presented) An electrical machine according claim 13, characterized in that the permanent-magnet members of the movable element are adapted to cooperate with those magnetic flux conductors of the stator which are associated with the first current-carrying section, and those magnetic flux conductors of the stator which are associated with the second current-carrying section.

15. (Previously presented) An electrical machine according to claim 1, characterized in that each magnetic flux conductor comprises at least one magnetic flux-conducting section, wherein said sections of each magnetic flux conductor are arranged in a line one after the other

which is parallel to the movement path, wherein the magnetic flux of said section of each magnetic flux conductor extends in essentially the same direction and wherein a dividing member is arranged between each pair of adjacent magnetic flux conductors and comprises main sections which comprise a magnetically conducting material and which extend along said section.

16. (Previously presented) An electrical machine according to claim 15, characterized in that said sections form a magnetic flux-conducting central section.

17. (Previously presented) An electrical machine according to claim 16, characterized in that each a magnetic flux conductor comprises at least said central section and two magnetic flux-conducting end sections.

18. (Previously presented) An electrical machine according to claim 17, characterized in that each dividing member is magnetically insulating along the end sections.

19. (Previously presented) An electrical machine according to claim 18, characterized in that each dividing member forms a space with air along the end sections.

20. (Previously presented) An electrical machine according to claim 1, characterized in that the main section of said dividing member is made of a magnetically conducting iron.

21. (Previously presented) An electrical machine according to claim 1, characterized in that the two end sections of each magnetic flux conductor are displaced in a plane essentially perpendicular to the movement path in relation to the end sections of each adjacent magnetic flux conductor.

22. (Canceled)

23. (Previously presented) An electrical machine according to claim 1, characterized in that the movable element is connected to at least one piston that is movably arranged in a housing.

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24. (Previously presented) An electrical machine according to claim 23, characterized in that the electrical machine is adapted to cooperate with a combustion engine, whereby said housing forms a combustion chamber in which the piston is movable back and forth.

25. (Canceled)

26. (Previously presented) Use of the electrical machine according to claim 1 as a generator for generating electric power.

27. (Previously Presented) Use of the electrical machine according to claim 1 as a generator for generating electric power, said generator being adapted to constitute a component in one of a wind power plant and a wave power plant.

28. (Previously presented) Use of the electrical machine according to claim 1 as a motor for generating mechanical power.

29. (Previously presented) Use according to claim 28, wherein said motor is adapted to form a drive motor in a vehicle.